

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
2 February 2006 (02.02.2006)

PCT

(10) International Publication Number
WO 2006/011036 A1

(51) International Patent Classification:
F04D 29/38 (2006.01) F04D 29/32 (2006.01)

(21) International Application Number:
PCT/IB2005/002168

(22) International Filing Date: 18 July 2005 (18.07.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
BO2004A000468 23 July 2004 (23.07.2004) IT

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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CII, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW.

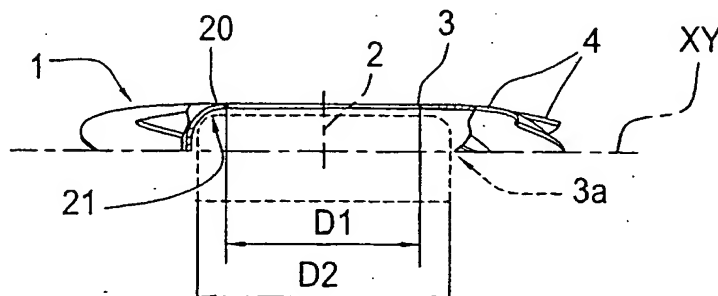
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: AXIAL IMPELLER WITH ENHANCED FLOW



(57) Abstract: An axial impeller (1), with enhanced flow, rotating in a plane (XY) about an axis (2) comprises a central hub (3), whose diameter is smaller than the diameter of the drive motor (3a), a plurality of blades (4) having a base (5) and a tip (6), the blades (4) being delimited by a convex leading edge (7) and by a convex trailing edge (8), whose projections onto the plane of rotation of the impeller are each defined by circular arc segments; the blades (4) are composed of sections having aerodynamic profiles (18) each having a decreasing length and an increasingly curved shape starting at the edge towards the hub; towards the hub each blade (4) has a box-shaped portion (20) that forms a wide seat (21) providing housing for an drive motor (3a) having a diameter that corresponds substantially to the seat (21).